

FEDERAL ITEM IDENTIFICATION GUIDE

WATER HEATERS

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Commander

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This Federal Item Identification Guide for Supply Cataloging is issued under the authority of Department of Defense Instruction 5025.7.

The use of this publication is mandatory for US. Federal Activities participating in Federal Catalog System Operations.

BY ORDER OF THE DIRECTOR

/s/

Commander

Defense Logistics Information Service

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GENERAL INFORMATION

1. Purpose and Scope

This Federal Item Identification Guide (FIIG) is a self-contained document for the collection, coding, transmittal, and retrieval of item characteristics and related supply management data for an item of supply for logistical use. This FIIG is to be used to describe items of supply identified by the index of approved item names appearing in this section.

2. Contents

This FIIG is comprised of the following:

- Index of Approved Item Names Covered by this FIIG
- Applicability Key Index
- Section I - Item Characteristics Data Requirements
- Section III - New text that should be here.
- Appendix A - Reply Tables
- Appendix B - Reference Drawing Groups (as applicable)
- Appendix C - Technical Data Tables (as applicable)

a. Index of Approved Item Names Covered by this FIIG:

The index lists the approved item names with definitions and item name codes as they appear in Cataloging Handbook H6, applicable to this FIIG. In addition, each name entry is assigned an applicability key for use in relating the characteristics requirements in Section I to the specific item name.

b. Applicability Key Index:

The purpose of this index is to provide the user with a ready reference for determining the specific requirements which are applicable to a given approved item name. This index lists all requirements in sequence as they appear in the FIIG. The applicability of a Master Requirement Coded requirement is indicated by the column headed by the specific item name applicability key as follows:

(1) The letter "X" indicates the requirement must be answered for a full descriptive item.

(2) The letters "AR" indicate the requirement is to be answered as required by (1) instructional notes within the FIIG; (2) when the reply is predicated on replies to a related main requirement; or (3) when an asterisk (*) is used in conjunction with the applicability key column in Section I.

(3) A blank in the column indicates the requirement is not applicable to the specific item name.

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c. Section I - Item Characteristics Data Requirements:

This section contains the physical and performance characteristics requirements needed to describe and identify an item of supply. These characteristics differentiate one item from all other items of supply and are to be used to meet the needs of all supported functions. This section is arranged in columns. Identification of each column and instructions pertinent thereto are as follows:

(1) Applicability Key:

The first column shows the applicability key(s) for each requirement. It indicates whether the requirement need be satisfied for the item being identified. "ALL" indicates that the requirement must be answered for all items covered by the FIIG. One or more alphabetic character(s) or group of one or more alphabetic characters indicates a response is required when describing items with an approved item name or names represented by the key(s). An asterisk (*) used in conjunction with any applicability key indicates that the characteristic stated in the requirement may not be applicable to all items covered by the FIIG.

(2) Master Requirement Codes (MRC):

A four-position code which is assigned to a FIIG requirement for identification of the requirement, cross-referencing requirements in the various sections and appendices of the FIIG, and for mechanized processing and retrieval of FIIG generated data. Absence of a MRC for a requirement indicates a lead-in to requirements with individual MRCs in Appendix B.

(a) The coding technique for providing MULTIPLE/OPTIONAL responses will not be used for a Section I requirement assigned Mode Code A or L that leads to Appendix B sketches with dimensional requirements.

(b) Identified Secondary Address Coding:

This technique is for extending the Master Requirement Code so that a unique address is provided for each application of the requirement in relation to the item and is authorized only as instructed within the requirement. Responses coded through this technique will always consist of the following: (1) Master Requirement Codes, (2) indicator code (a single numeric character determined by the number of positions contained), (3) identified secondary address code (1 to 3-digit alphabetic codes determined by the number of predicted replies), (4) the mode code, (5) the reply code and/or clear text response, and (6) end with a record separator (*). Steps (1) through (6) are repeated for each application of the requirement.

(c) AND/OR coding:

A technique for extending the Master Requirement Code to provide a distinctive address for multiple responses to the same requirement. Responses coded through this technique will always consist of (1) Master Requirement Code, (2) mode code, (3) the response or reply code (as instructed by the requirement), (4) a single dollar sign (\$) for an OR condition, or a double dollar sign (\$\$) for an AND condition, (5) the mode code, (6) the response or reply code

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(followed by conditions (4) through (6) for each of the multiple responses) and (7) end with a record separator (*). NOTE: Apply this technique only when instructed by the requirement sample reply (e.g.).

(3) Mode Code:

A one-position alphabetic code that specifies the manner in which a response will be prepared. Each requirement assigned a MRC is also assigned a mode code. Sample replies follow each FIIG requirement displaying the proper construction of a response for the assigned mode code. The response to a requirement will always be prepared in accordance with the assigned mode code and sample reply except in the following instances:

(a) Use of E Mode Code replies is not authorized. If a reply needed to describe an item is not listed in the applicable table, contact the FIIG Initiator.

(b) Mode Code K may not be used for any requirement unless instructed by the requirement instructions.

(4) Requirement:

This portion includes the characteristics data elements and data use identifiers required to identify and differentiate one item of supply from another, narrative definitions, and explanations as to use and method of expression. Instructions for coding and preparing replies are also provided.

(5) Reply Code:

A code that represents an established authorized reply to a requirement.

d. Section III - Supplementary Technical and Supply Management Data:

This section includes those characteristics requirements necessary to support specific logistics functions other than National Stock Number assignment.

e. Appendix A - Reply Tables:

Tables of authorized replies to requirements and reply codes when the tables are too lengthy for inclusion in Section I/III, when applicable.

f. Appendix B - Reference Drawings:

This appendix contains representative illustrations which portray specific variations of one or more generic characteristics. If reference drawings contain requirements pages to be used in conjunction with illustrations for dimensioning purposes, the requirements pages will contain Master Requirement Codes, mode codes, and a statement of the requirement. A response to requirements on a requirements page is necessary only for those Master Requirement Codes applicable to the illustration selected.

g. Appendix C - Technical Data Tables:

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This appendix contains conversion charts and similar data pertinent to the requirements in Section I/III, when applicable.

3. Enter administrative MRC CLQL immediately following the last FIIG requirement reply, as instructed below:

<u>MRC</u>	<u>Mode</u> <u>Code</u>	<u>Requirement</u>	<u>Example</u>
CLQL	G	COLLOQUIAL NAME (common usage name by which an item is known)	CLQLGWOVEN WIRE CLOTH*

4. Special Instructions and Indicator Definitions

a. Measurements:

Unless otherwise indicated within a requirement example, enter all measurements in decimal form, carried to the nearest three decimal places, with a minimum of one digit preceding the decimal. For SI (metric), enter all measurements with a minimum of one digit before and after the decimal. For fraction to decimal conversion, see Appendix C.

b. Indicators:

A cross hatch (#) following an AIN, MRC, Reply Code or Drawing Number indicates for "ALL EXCEPT USA" use only.

5. Indexes

a. Index of Data Requirements

This index is arranged in alphabetic sequence by Master Requirement Code, cross-referenced to the applicable data requirement and page number(s).

b. Index of Approved Item Names

This index is arranged in alphabetic sequence referenced to Applicability Key.

c. Applicability Key Index

This index is arranged in Applicability Key Sequence.

6. Maintenance

Requests for revisions and other changes will be directed to:

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INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG

INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG

<u>Approved Item Name</u>	<u>INC</u>	<u>App Key</u>
DISPENSER, HOT WATER	41977	AA
A self-contained item consisting of a water tank, electric heating element and faucet for economical dispensing of small amounts of hot water for beverage use.		
HEATER, WATER, ELECTRIC	07180	AA
A unit specifically designed for heating water by a direct fired method, utilizing electric heating element(s).		
HEATER, WATER, GAS	07181	BA
A unit specifically designed for heating water by a direct fired method, utilizing a gas fuel burned in a combustion chamber inclosed within itself. May be incorporated with a tank as an integral or as a separate unit for storage of the water so heated.		
HEATER, WATER, STEAM-HOT WATER HEATED	13711	CA
A unit designed to heat water in a storage tank which is equipped with a coil that receives steam or hot water from another source. See also HEATER, FLUID, INDUSTRIAL.		

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APPLICABILITY KEY INDEX

AA

NAME	X
AMHR	X
AMHX	X
ACDC	X
ELEC	X
FREQ	AR
FAAZ	AR
ABAL	X
AMRK	X
ALHG	X
AMJX	X
AEEA	AR
AMKA	X
MATL	X
AAJP	AR
AAJQ	AR
AAJJ	X
AHGR	X
AMLQ	X
AMLL	X
AMLR	X
AMLM	X
ADAV	AR
ABHP	AR
ABMK	AR
ABKW	AR
ABFY	AR
ADUM	AR
AKYN	AR
FEAT	AR
ZZZK	AR
ZZZT	AR
ZZZW	AR
ZZZX	AR
ZZZY	AR
CRTL	AR
PRPY	AR
ENAC	AR
AHWS	AR
ELRN	AR
ELCD	AR
AFJK	AR
SUPP	AR
ZZZV	AR
AGAV	AR
CXCY	AR

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APPLICABILITY KEY INDEX

	<u>BA</u>
NAME	X
AENF	X
AMHR	X
AMHX	X
ADSM	X
AMKA	X
MATL	X
AAJP	AR
AAJQ	AR
ALBM	X
AAJJ	X
AMLQ	X
AMLL	X
AMLR	X
AMLM	X
AMNX	X
AMNZ	X
AMPA	X
AHGR	X
ADAV	AR
ABHP	AR
ABMK	AR
ABKW	AR
AFJH	AR
FEAT	AR
ZZZK	AR
ZZZT	AR
ZZZW	AR
ZZZX	AR
ZZZY	AR
CRTL	AR
PRPY	AR
ENAC	AR
AHWS	AR
ELRN	AR
ELCD	AR
AFJK	AR
SUPP	AR
ZZZV	AR
AGAV	AR
CXCY	AR

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CA

NAME	X
ADSM	X
AMKA	X
MATL	X
SURF	AR
AAJJ	X
ABKV	X
ABHP	X
AMRE	X
AMRF	X
AMHR	X
AMRG	X
AMRH	X
AMLQ	X
AMLL	X
AMLR	X
AMLM	X
AFJH	AR
FEAT	AR
ZZZK	AR
ZZZT	AR
ZZZW	AR
ZZZX	AR
ZZZY	AR
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Body

SECTION: A

APP

Key	MRC	Mode Code	Requirements
-----	-----	-----------	--------------

ALL

NAME	D	ITEM NAME
------	---	-----------

Definition: A NOUN, WITH OR WITHOUT MODIFIERS, BY WHICH AN ITEM OF SUPPLY IS KNOWN.

Reply Instructions: Enter the applicable Item Name Code from the index appearing in the General Information Section. (e.g., NAMED07180*)

ALL

AMHR	J	HEATING CAPACITY PER HOUR
------	---	---------------------------

Definition: THE RATED HEATING CAPACITY OF THE ITEM PER HOUR.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMHRJG75.0*; AMHRJL283.8*)

For items that do not require a rating, change the Mode Code to K and enter Reply Code N. (e.g., AMHRKN*)

REPLY CODE

G

L

REPLY (AB10)

GALLONS

LITERS

ALL

AMHX	J	TEMP RISE PER HOUR
------	---	--------------------

Definition: THE NUMBER OF DEGREES THE TEMPERATURE RISES PER HOUR.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMHXJF20.0*)

REPLY CODE

C

F

REPLY (AB36)

DEG CELSIUS

DEG FAHRENHEIT

FIIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
------------	-----	-----------	--------------

ALL

CSBH J VOLTAGE IN VOLTS AND CURRENT TYPE

Definition: THE TOTAL ELECTRICAL VOLTAGE, EXPRESSED IN VOLTS, AND THE TYPE OF CURRENT, WHETHER ALTERNATING OR DIRECT.

Reply Instructions: Enter the applicable I/SAC from Appendix C, Table 3 followed by the mode code, the applicable Reply Code from the table below, and the numeric value. (e.g., CSBH1XJAC115.0; CSBH1AJAC115.0*; CSBH1BJDC28\$JDC32.0*)*

REPLY CODE

AC

DC

REPLY (AN87)

AC

DC

NOTE FOR MRCs FREQ AND FAAZ: IF REPLY CODE AC IS ENTERED FOR MRC CSBH, REPLY TO MRCs FREQ AND FAAZ.

ALL*

FREQ B FREQUENCY IN HERTZ

Definition: THE CYCLES PER SECOND (HERTZ) OF THE ALTERNATING CURRENT.

Reply Instructions: Enter the numeric value. (e.g., FREQB400.0*)

REPLY CODE

A

E

C

B

REPLY (AD02)

SINGLE

SINGLE/THREE

THREE

TWO

ALL*

FAAZ D PHASE

FIIG T
Section Parts

APP
Key MRC Mode Code Requirements

Definition: THE NUMBER OF ALTERNATING CURRENT PHASES.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., FAAZDC*; FAAZDA\$DB*)

<u>REPLY CODE</u>	<u>REPLY (AD02)</u>
A	SINGLE
E	SINGLE/THREE
C	THREE
B	TWO

ALL

ABAL D HEATING ELEMENT TYPE

Definition: INDICATES THE TYPE OF HEATING WHICH IMPARTS HEAT.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ABALDP*; ABALDN\$DP*)

For items that do not require a rating, change the Mode Code to K and enter Reply Code N. (e.g., AMRKKN*)

<u>REPLY CODE</u>	<u>REPLY (AA93)</u>
Z	ANY ACCEPTABLE
N	DOUBLE
P	SINGLE
W	TRIPLE

ALL

AMRK J HEATING ELEMENT WATTAGE RATING

Definition: THE RATED POWER WHICH A HEATING ELEMENT CAN SAFELY CONSUME OR PROVIDE, MEASURED IN WATTS.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMRKJAB15.000*; AMRKJAB15.000\$\$JAD25.000*)

<u>REPLY CODE</u>	<u>REPLY (AJ11)</u>
AB	LOWER
AE	MIDDLE

FIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
------------	-----	-----------	--------------

ALL

ALHG D ATTACHMENT DEVICE

Definition: AN INDICATION OF WHETHER OR NOT AN ATTACHMENT DEVICE IS INCLUDED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ALHGDB*; ALHGDB\$DC*)

<u>REPLY CODE</u>	<u>REPLY (AA49)</u>
B	INCLUDED
C	NOT INCLUDED

ALL

AMJX D THERMOSTATIC SWITCH

Definition: AN INDICATION OF WHETHER OR NOT A THERMOSTATIC SWITCH IS INCLUDED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AMJXDB*; AMJXDB\$DC*)

<u>REPLY CODE</u>	<u>REPLY (AA49)</u>
B	INCLUDED
C	NOT INCLUDED

ALL*

AEEA D SWITCH TYPE

Definition: INDICATES THE TYPE OF SWITCH INCLUDED IN THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AEEADAL*; AEEADAK\$DAL*)

For items that do not require a rating, change the Mode Code to K and enter Reply Code N. (e.g., AMKAKN*)

<u>REPLY CODE</u>	<u>REPLY (AC82)</u>
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Section Parts

APP Key	MRC	Mode Code	Requirements
		AK	DOUBLE THROW
		AL	SINGLE THROW

ALL

AMKA J TANK CAPACITY

Definition: INDICATES THE CAPACITY OF THE TANK.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMKAJG75.0*; AMKAJL283.8*)

ALL

MATL D MATERIAL

Definition: THE ELEMENT, COMPOUND, OR MIXTURE OF WHICH AN ITEM IS FABRICATED, EXCLUDING ANY SURFACE TREATMENT.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 2. (e.g., MATLDCU0000*; MATLDCU0000\$DCK0000*; MATLDCU0000\$DCK0000*)

ALL*

AAJP D OUTSIDE SURFACE TREATMENT

Definition: CONSISTS OF PLATING, DIP, AND/OR COATING THAT CANNOT BE WIPE OFF. PLATING AND/OR COATING IS ANY CHEMICAL AND/OR METALLIC ADDITIVE, ELECTROCHEMICAL, OR MILD MECHANICAL PROCESS WHICH PROTECTS THE OUTSIDE SURFACE.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 3. (e.g., AAJPDENE000*; AAJPDENE000\$DENC000*; AAJPDENE000\$DENC000*)

ALL*

AAJQ D INSIDE SURFACE TREATMENT

Definition: CONSISTS OF PLATING, DIP, AND/OR COATING THAT CANNOT BE WIPE OFF. PLATING AND/OR COATING IS ANY CHEMICAL AND/OR METALLIC ADDITIVE, ELECTROMECHANICAL, OR MILD MECHANICAL PROCESS WHICH PROTECTS THE INSIDE SURFACE.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 3. (e.g., AAJQDENC000*; AAJQDENC000\$DTDA000*; AAJQDENC000\$DTDA000*)

FIIG T
Section Parts

APP			
Key	MRC	Mode Code	Requirements

For items that do not require a rating, change the Mode Code to K and enter Reply Code N. (e.g., AAJJKN*)

<u>REPLY CODE</u>	<u>REPLY (AB18)</u>
Z	KILOGRAMS
K	KILOGRAMS PER SQUARE CENTIMETER
P	POUNDS
V	POUNDS PER SQUARE INCH

ALL

AAJJ	J	MAXIMUM OPERATING PRESSURE
------	---	----------------------------

Definition: THE MAXIMUM PRESSURE AT WHICH AN ITEM IS DESIGNED TO OPERATE.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AAJJJV128.0*; AAJJJK90.0*)

<u>REPLY CODE</u>	<u>REPLY (AB18)</u>
Z	KILOGRAMS
K	KILOGRAMS PER SQUARE CENTIMETER

ALL

AHGR	D	INSULATED FEATURE
------	---	-------------------

Definition: AN INDICATION OF WHETHER OR NOT AN INSULATED FEATURE IS INCLUDED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AHGRDB*; AHGRDB\$DC*)

ALL

AMLQ	A	WATER INLET CONNECTION QUANTITY
------	---	---------------------------------

Definition: THE NUMBER OF WATER INLET CONNECTIONS.

Reply Instructions: Enter the quantity. (e.g., AMLQA6*; AMLQA6\$A7*)

(e.g., AMLLJNP1/2-14*;

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Section Parts

APP Key	MRC	Mode Code	Requirements
------------	-----	-----------	--------------

AMLLJNP1/2-14\$JNP3/4-14*)

ALL

AMLL	J	WATER INLET CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
------	---	---

Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE, AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE WATER INLET CONNECTION.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 4, followed by the thread diameter and number of threads per specified length.

ALL

AMLR	A	WATER OUTLET CONNECTION QUANTITY
------	---	----------------------------------

Definition: THE NUMBER OF WATER OUTLET CONNECTIONS.

Reply Instructions: Enter the quantity. (e.g., AMLRA6*; AMLRA6\$A7*)

(e.g., AMLMJNP1/2-14*;

AMLMJNP1/2-14\$JNP3/4-14*)

ALL

AMLM	J	WATER OUTLET CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
------	---	--

Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE, AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE WATER OUTLET CONNECTION.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 4, followed by the thread diameter and number of threads per specified length.

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

REPLY (AC20)

NOMINAL

FIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
		B	MINIMUM
		C	MAXIMUM

ALL*

ADAV J OVERALL DIAMETER

Definition: A MEASUREMENT OF THE LONGEST STRAIGHT LINE ACROSS A CIRCULAR CROSS-SECTIONAL PLANE.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADAVJAA2.400*; ADAVJLA88.9*; ADAVJAB3.500\$\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL*

ABHP J OVERALL LENGTH

Definition: THE DIMENSION MEASURED ALONG THE LONGITUDINAL AXIS WITH TERMINATED POINTS AT THE EXTREME ENDS OF THE ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABHPJAA8.000*; ABHPJLA88.9*; ABHPJAB3.500\$\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

REPLY (AC20)

NOMINAL

FIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
		B	MINIMUM
		C	MAXIMUM

ALL*

ABMK J OVERALL WIDTH

Definition: AN OVERALL MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF AN ITEM, IN DISTINCTION FROM THICKNESS.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABMKJAA2.500*; ABMKJLA88.9*; ABMKJAB3.500\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL*

ABKW J OVERALL HEIGHT

Definition: THE DISTANCE MEASURED IN A STRAIGHT LINE FROM THE BOTTOM TO THE TOP OF AN ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABKWJAA2.500*; ABKWJLA88.9*; ABKWJAB3.500\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

REPLY (AC20)

NOMINAL

FIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
		B	MINIMUM
		C	MAXIMUM

ALL*

ABFY J OVERALL DEPTH

Definition: AN OVERALL MEASUREMENT BETWEEN SPECIFIED POINTS OF AN ITEM, IN DISTINCTION FROM HEIGHT.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABFYJAA2.40*; ABFYJLA88.9*; ABFYJAB3.500\$\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL*

ADUM J OVERALL THICKNESS

Definition: AN OVERALL MEASUREMENT OF THE SMALLEST DIMENSION OF AN ITEM, IN DISTINCTION FROM LENGTH OR WIDTH.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADUMJAA2.500*; ADUMJLA88.9*; ADUMJAB3.500\$\$JAC4.000*)

FIIG T
Section Parts

SECTION: B

APP

Key MRC Mode Code Requirements

ALL

NAME D ITEM NAME

Definition: A NOUN, WITH OR WITHOUT MODIFIERS, BY WHICH AN ITEM OF SUPPLY IS KNOWN.

Reply Instructions: Enter the applicable Item Name Code from the index appearing in the General Information Section. (e.g., NAMED07181*)

ALL

AENF D SPECIFIC GAS FOR WHICH DESIGNED

Definition: THE SPECIFIC GAS WITH WHICH THE ITEM IS DESIGNED TO BE USED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AENFDAR*; AENFDAR\$DDP*)

<u>REPLY CODE</u>	<u>REPLY (AB75)</u>
A	ANY ACCEPTABLE
AR	BUTANE
DP	MANUFACTURED GAS
CE	NATURAL GAS
CQ	PROPANE

ALL

AMHR J HEATING CAPACITY PER HOUR

Definition: THE RATED HEATING CAPACITY PER HOUR OF THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMHRJG75.0*; AMHRJL283.8*)

For items that do not require a rating, change the Mode Code to K and enter Reply Code N. (e.g., AMHRKN*)

<u>REPLY CODE</u>	<u>REPLY (AB10)</u>
G	GALLONS
L	LITERS

FIIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
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ALL

AMHX	J	TEMP RISE PER HOUR
------	---	--------------------

Definition: THE NUMBER OF DEGREES THE TEMPERATURE RISES PER HOUR.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMHXJF60.0*)

<u>REPLY CODE</u>	<u>REPLY (AB36)</u>
C	DEG CELSIUS
F	DEG FAHRENHEIT

ALL

ADSM	D	MOUNTING POSITION
------	---	-------------------

Definition: THE INSTALLED POSITION FOR WHICH THE ITEM IS DESIGNED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ADSMDB*; ADSMDB\$DD*)

<u>REPLY CODE</u>	<u>REPLY (AC60)</u>
B	HORIZONTAL
D	VERTICAL

ALL

AMKA	J	TANK CAPACITY
------	---	---------------

Definition: INDICATES THE CAPACITY OF THE TANK.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMKAJG75.0*; AMKAJL283.8*)

<u>REPLY CODE</u>	<u>REPLY (AB10)</u>
G	GALLONS
L	LITERS

FIIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
<hr/>			
ALL			
	MATL	D	MATERIAL
	Definition: THE ELEMENT, COMPOUND, OR MIXTURE OF WHICH AN ITEM IS FABRICATED, EXCLUDING ANY SURFACE TREATMENT.		
	Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 2. (e.g., MATLDCU0000*; MATLDCU0000\$DCK0000*; MATLDCU0000\$DCK0000*)		
ALL*			
	AAJP	D	OUTSIDE SURFACE TREATMENT
	Definition: CONSISTS OF PLATING, DIP, AND/OR COATING THAT CANNOT BE WIPE OFF. PLATING AND/OR COATING IS ANY CHEMICAL AND/OR METALLIC ADDITIVE, ELECTROCHEMICAL, OR MILD MECHANICAL PROCESS WHICH PROTECTS THE OUTSIDE SURFACE.		
	Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 3, entering multiple replies in the same sequence as MRC MATL. (e.g., AAJPDENE000*; AAJPDENE000\$DENC000*; AAJPDENE000\$DENC000*)		
ALL*			
	AAJQ	D	INSIDE SURFACE TREATMENT
	Definition: CONSISTS OF PLATING, DIP, AND/OR COATING THAT CANNOT BE WIPE OFF. PLATING AND/OR COATING IS ANY CHEMICAL AND/OR METALLIC ADDITIVE, ELECTROCHEMICAL, OR MILD MECHANICAL PROCESS WHICH PROTECTS THE INSIDE SURFACE.		
	Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 3, entering multiple replies in the same sequence as MRC MATL. (e.g., AAJQDENC000*; AAJQDENE000\$DENC000*; AAJQDENE000\$DENC000*)		
ALL			
	ALBM	D	OPERATING CONTROL METHOD
	Definition: THE MEANS BY WHICH THE ITEM IS OPERATED OR CONTROLLED.		
	Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ALBMDAB*; ALBMDAB\$DAF*)		

FIG T
Section Parts

APP
Key

MRC

Mode Code

Requirements

FIIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
<hr/>			
ALL			
	AMLR	A	WATER OUTLET CONNECTION QUANTITY
	Definition: THE NUMBER OF WATER OUTLET CONNECTIONS.		
	Reply Instructions: Enter the quantity. (e.g., AMLRA2*; AMLRA2\$A3*)		
ALL			
	AMLM	J	WATER OUTLET CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
	Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE, AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE WATER OUTLET CONNECTION.		
	Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 4, followed by the thread diameter and number of threads per specific length.		
	(e.g., AMLMJNP1/2-14*; AMLMJNP1/2-14\$JNP3/4-14*)		
ALL			
	AMNX	A	GAS CONNECTION QUANTITY
	Definition: THE NUMBER OF GAS CONNECTIONS.		
	Reply Instructions: Enter the quantity. (e.g., AMNXA1*; AMNXA1\$A2*)		
ALL			
	AMNZ	J	GAS CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
	Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE, AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE GAS CONNECTION.		
	Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 4, followed by the thread diameter and number of threads per specific length.		
	(e.g., AMNZJNP1/2-24*;		

FIIG T
Section Parts

APP			
Key	MRC	Mode Code	Requirements

AMNZJNP1/2-24\$JNP3/4-20*)

ALL

AMPA J FLUE PIPE SIZE

Definition: THE NUMERIC SIZE DESIGNATION OF THE FLUE PIPE.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., AMPAJAA3.00*; AMPAJLA76.2*; AMPAJAB4.000\$JAC4.500*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL

AHGR D INSULATED FEATURE

Definition: AN INDICATION OF WHETHER OR NOT AN INSULATED FEATURE IS INCLUDED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AHGRDB*; AHGRDB\$DC*)

REPLY CODE

B

C

REPLY (AA49)

INCLUDED

NOT INCLUDED

ALL*

ADAV J OVERALL DIAMETER

Definition: A MEASUREMENT OF THE LONGEST STRAIGHT LINE ACROSS A CIRCULAR CROSS-SECTIONAL PLANE.

FIIG T
Section Parts

APP			
Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ADAVJAA2.400*; ADAVJLA60.9*; ADAVJAB3.500\$\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL*

ABHP J OVERALL LENGTH

Definition: THE DIMENSION MEASURED ALONG THE LONGITUDINAL AXIS WITH TERMINATED POINTS AT THE EXTREME ENDS OF THE ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABHPJAA8.000*; ABHPJLA203.2*; ABHPJAB3.500\$\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL*

ABMK J OVERALL WIDTH

Definition: AN OVERALL MEASUREMENT TAKEN AT RIGHT ANGLES TO THE LENGTH OF AN ITEM, IN DISTINCTION FROM THICKNESS.

FIG T
Section Parts

APP			
Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABMKJAA2.500*; ABMKJLA63.0*; ABMKJAB3.500\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL*

ABKW J OVERALL HEIGHT

Definition: THE DISTANCE MEASURED IN A STRAIGHT LINE FROM THE BOTTOM TO THE TOP OF AN ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABKWJAA2.500*; ABKWJLA63.0*; ABKWJAB3.500\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL*

AFJH G FURNISHED ITEMS

Definition: ITEMS FURNISHED AS ACCESSORIES WHICH ARE NOT SPECIFIED ELSEWHERE.

FIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
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Reply Instructions: Enter the reply in clear text. (e.g., AFJHGPILOT SAFETY*)

FIIG T
Section Parts

SECTION: C

APP

Key	MRC	Mode Code	Requirements
-----	-----	-----------	--------------

ALL

NAME	D	ITEM NAME
------	---	-----------

Definition: A NOUN, WITH OR WITHOUT MODIFIERS, BY WHICH AN ITEM OF SUPPLY IS KNOWN.

Reply Instructions: Enter the applicable Item Name Code from the index appearing in the General Information Section. (e.g., NAMED13711*)

ALL

ADSM	D	MOUNTING POSITION
------	---	-------------------

Definition: THE INSTALLED POSITION FOR WHICH THE ITEM IS DESIGNED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ADSMDB*; ADSMDB\$DD*)

<u>REPLY CODE</u>	<u>REPLY (AC60)</u>
B	HORIZONTAL
D	VERTICAL

ALL

AMKA	J	TANK CAPACITY
------	---	---------------

Definition: INDICATES THE CAPACITY OF THE TANK.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMKAJG30.0*; AMKAJL113.5*)

<u>REPLY CODE</u>	<u>REPLY (AB10)</u>
G	GALLONS
L	LITERS

ALL

MATL	D	MATERIAL
------	---	----------

Definition: THE ELEMENT, COMPOUND, OR MIXTURE OF WHICH AN ITEM IS FABRICATED, EXCLUDING ANY SURFACE TREATMENT.

FIIG T
Section Parts

APP

Key	MRC	Mode Code	Requirements
-----	-----	-----------	--------------

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 2. (e.g., MATLDCU0000*; MATLDCU0000\$DCK0000*; MATLDCU0000\$DCK0000*)

ALL*

SURF	D	SURFACE TREATMENT
------	---	-------------------

Definition: CONSISTS OF PLATING, DIP, AND/OR COATING THAT CANNOT BE WIPE OFF. PLATING AND/OR COATING IS ANY CHEMICAL AND/OR METALLIC ADDITIVE, ELECTROCHEMICAL, OR MILD MECHANICAL PROCESS WHICH PROTECTS A SURFACE.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 3. (e.g., SURFDENE000*; SURFDENE000\$DENC000*; SURFDEND000\$DENC000*)

ALL

AAJJ	J	MAXIMUM OPERATING PRESSURE
------	---	----------------------------

Definition: THE MAXIMUM PRESSURE AT WHICH AN ITEM IS DESIGNED TO OPERATE.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AAJJJV50.0*; AAJJJK35.0*)

For items that do not require a rating, change the Mode Code to K and enter Reply Code N. (e.g., AAJJKN*)

<u>REPLY CODE</u>	<u>REPLY (AB18)</u>
Z	KILOGRAMS
K	KILOGRAMS PER SQUARE CENTIMETER
P	POUNDS
V	POUNDS PER SQUARE INCH

ALL

ABKV	J	OUTSIDE DIAMETER
------	---	------------------

Definition: THE LENGTH OF A STRAIGHT LINE WHICH PASSES THROUGH THE CENTER OF A CIRCULAR FIGURE OR BODY, AND TERMINATES AT THE OUTSIDE CIRCUMFERENCE.

FIIG T
Section Parts

APP			
Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABKVJAA0.250*; ABKVJLA6.3*; ABKVJAB0.245\$\$JAC0.255*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL

ABHP J OVERALL LENGTH

Definition: THE DIMENSION MEASURED ALONG THE LONGITUDINAL AXIS WITH TERMINATED POINTS AT THE EXTREME ENDS OF THE ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABHPJAA8.000*; ABHPJLA203.2*; ABHPJAB3.500\$\$JAC4.000*)

Table 1

REPLY CODE

A

L

REPLY (AA05)

INCHES

MILLIMETERS

Table 2

REPLY CODE

A

B

C

REPLY (AC20)

NOMINAL

MINIMUM

MAXIMUM

ALL

AMRE J HEATING COIL MAXIMUM OPERATING
PRESSURE

FIIG T
Section Parts

APP

Key MRC Mode Code Requirements

Definition: THE MAXIMUM PRESSURE AT WHICH THE HEATING COIL IS DESIGNED TO OPERATE.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMREJV150.0*; AMREJK105.0*)

<u>REPLY CODE</u>	<u>REPLY (AB18)</u>
Z	KILOGRAMS
K	KILOGRAMS PER SQUARE CENTIMETER
P	POUNDS
V	POUNDS PER SQUARE INCH

ALL

AMRF J HEATING COIL SURFACE AREA

Definition: AN INDICATION OF THE SURFACE AREA OF A HEATING COIL.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMRFJA6.250*; AMRFJC40.3*)

<u>REPLY CODE</u>	<u>REPLY (AC51)</u>
C	SQUARE CENTIMETERS
F	SQUARE FEET
A	SQUARE INCHES
M	SQUARE METERS

ALL

AMHR J HEATING CAPACITY PER HOUR

Definition: THE RATED HEATING CAPACITY OF THE ITEM PER HOUR.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AMHRJG50.0*; AMHRJL35.1*)

For items that do not require a rating, change the Mode Code to K and enter Reply Code N. (e.g., AMHRKN*)

<u>REPLY CODE</u>	<u>REPLY (AB10)</u>
G	GALLONS
L	LITERS

FIIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
------------	-----	-----------	--------------

ALL

AMRG	J	HEATING COIL INLET CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
------	---	---

Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE HEATING COIL INLET CONNECTION.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 4, followed by the thread diameter and number of threads per specified length.

(e.g., AMRGJNP2 IN.-11-1/2*)

ALL

AMRH	J	HEATING COIL OUTLET CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
------	---	--

Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE HEATING COIL OUTLET CONNECTION.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 4, followed by the thread diameter and number of threads per specified length.

(e.g., AMRHJNP2 IN.-11-1/2*)

ALL

AMLQ	A	WATER INLET CONNECTION QUANTITY
------	---	---------------------------------

Definition: THE NUMBER OF WATER INLET CONNECTIONS.

Reply Instructions: Enter the quantity. (e.g., AMLQA3*)

ALL

AMLL	J	WATER INLET CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
------	---	--

Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE, AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE WATER INLET CONNECTION.

FIIG T
Section Parts

APP

Key	MRC	Mode Code	Requirements
-----	-----	-----------	--------------

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 4, followed by the thread diameter and number of threads per specified length.

(e.g., AMLLJNP1 IN.-11-1/2*)

ALL

AMLR	A	WATER OUTLET CONNECTION QUANTITY
------	---	----------------------------------

Definition: THE NUMBER OF WATER OUTLET CONNECTIONS.

Reply Instructions: Enter the quantity. (e.g., AMLRA2*)

ALL

AMLM	J	WATER OUTLET CONNECTION THREAD SIZE AND SERIES/TYPE DESIGNATOR
------	---	---

Definition: DESIGNATES THE THREAD DIAMETER, SERIES/TYPE, AND NUMBER OF THREADS PER MEASUREMENT SCALE OF THE WATER OUTLET CONNECTION.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 4, followed by the thread diameter and number of threads per specified length.

(e.g., AMLMJNP1/2-14*)

ALL*

AFJH	G	FURNISHED ITEMS
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Definition: ITEMS FURNISHED AS ACCESSORIES WHICH ARE NOT SPECIFIED ELSEWHERE.

Reply Instructions: Enter the reply in clear text. (e.g., AFJHGCHECK VALVE*)

FIIG T
Section Parts

SECTION: STANDARD

APP		Mode	
Key	MRC	Code	Requirements

ALL*

FEAT	G	SPECIAL FEATURES
------	---	------------------

Definition: THOSE UNUSUAL OR UNIQUE CHARACTERISTICS OR QUALITIES OF AN ITEM NOT COVERED IN THE OTHER REQUIREMENTS AND WHICH ARE DETERMINED TO BE ESSENTIAL FOR IDENTIFICATION.

Reply Instructions: Enter the reply in clear text. Separate multiple replies with a semicolon. (e.g., FEATGADJUSTABLE NOSE CLIP*; FEATGADJUSTABLE NOSE PIECE; DISPOSABLE*)

ALL*

ZZZK	J	SPECIFICATION/STANDARD DATA
------	---	-----------------------------

Definition: THE DOCUMENT DESIGNATOR OF THE SPECIFICATION OR STANDARD WHICH ESTABLISHED THE ITEM OF SUPPLY.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the Commercial and Government Entity (CAGE) Code of the entity controlling the document, a dash, and the document designator. The agency that controls the limited coordination document must be preceded and followed by a slash following the designator. The word canceled or superseded must be preceded and followed by a slash for the designator. Professional and industrial association specifications/standards are differentiated from a manufacturer's specification in that the data has been coordinated and published by the professional and industrial association. Include amendments and revisions where applicable.

(e.g., ZZZKJT81337-30642B*;

ZZZKJS81349-MIL-D-180 REV1/CANCELED/*;

ZZZKJP80205-NAS1103*;

ZZZKJS81349-MIL-C-1140C/CE/*;

ZZZKJT81337-30642B\$\$JP80205-NAS1103*)

REPLY
CODE

S	GOVERNMENT SPECIFICATION
T	GOVERNMENT STANDARD
D	MANUFACTURERS SOURCE CONTROL

REPLY (AN62)

FIIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
		R	MANUFACTURERS SPECIFICATION
		N	MANUFACTURERS SPECIFICATION CONTROL
		M	MANUFACTURERS STANDARD
		B	NATIONAL STD/SPEC
		A	PROFESSIONAL/INDUSTRIAL ASSOCIATION SPECIFICATION
		P	PROFESSIONAL/INDUSTRIAL ASSOCIATION STANDARD

NOTE FOR MRC ZZZT: IF THE SPECIFICIATION/STANDARD CITED IN REPLY TO MRC ZZZK IS NONDEFINITIVE, REPLY TO MRC ZZZT. THIS REPLY IS THE DATA WHICH IS NOT RECORDED IN SEGMENT C.

ALL* (See Note Above)

ZZZT J NONDEFINITIVE SPEC/STD DATA

Definition: THE NUMBER, LETTER, OR SYMBOL THAT INDICATES THE TYPE, STYLE, GRADE, CLASS, AND THE LIKE, OF AN ITEM IN A NONIDENTIFYING SPECIFICATION OR STANDARD.

Reply Instructions: Enter the applicable Reply Code from [Appendix A](#), Table 1, followed by the appropriate number, letter, or symbol. (e.g., ZZZTJTY1*; ZZZTJTY1\$JSTA*; ZZZTJTY1\$JSTA*)

ALL*

ZZZW G DEPARTURE FROM CITED DOCUMENT

Definition: THE TECHNICAL DIFFERENTIATING CHARACTERISTIC(S) OF AN ITEM OF SUPPLY WHICH DEPART(S) FROM THE TEXT OF A SPECIFICATION OR A STANDARD IN THAT IT REPRESENTS A SELECTION OF CHARACTERISTICS STATED IN THE SPECIFICATION OR STANDARD AS BEING OPTIONAL, OR A VARIATION FROM ONE OR MORE OF THE STATED CHARACTERISTICS, OR AN ADDITIONAL CHARACTERISTIC NOT STATED IN THE SPECIFICATION OR STANDARD.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZWGAS MODIFIED BY MATERIAL*)

ALL*

ZZZX G DEPARTURE FROM CITED DESIGNATOR

FIIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
<p>Definition: THE VARIATION WHEN THE ITEM IS IN CONFORMITY WITH A TYPE DESIGNATOR COVERED BY A SPECIFICATION OR STANDARD, EXCEPT IN REGARD TO ONE OR MORE TECHNICAL DIFFERENTIATING CHARACTERISTICS.</p> <p>Reply Instructions: Enter the reply in clear text. (e.g., ZZZXGAS MODIFIED BY MATERIAL*)</p>			
ALL*			
	ZZZY	G	REFERENCE NUMBER DIFFERENTIATING CHARACTERISTICS
<p>Definition: A FEATURE OF THE ITEM OF SUPPLY WHICH MUST BE SPECIFICALLY RECORDED WHEN THE REFERENCE NUMBER COVERS A RANGE OF ITEMS.</p> <p>Reply Instructions: Enter the reply in clear text. (e.g., ZZZYGCOLOR CODED LEADS*; ZZZYGAS DIFFERENTIATED BY MATERIAL*)</p>			
ALL*			
	CRTL	A	CRITICALITY CODE JUSTIFICATION
<p>Definition: THE MASTER REQUIREMENT CODES OF THOSE REQUIREMENTS WHICH ARE TECHNICALLY CRITICAL BY REASON OF TOLERANCE, FIT, PERFORMANCE, OR OTHER CHARACTERISTICS WHICH AFFECT IDENTIFICATION OF THE ITEM.</p> <p>Reply Instructions: Enter the Master Requirement Code for the requirement, the reply to which renders the item as being critical. (e.g., CRTLAMATL*; CRTLAMATL\$\$ASURF*)</p> <p>Reply to this requirement only if the header record for the item identification for the item being identified has been coded as critical.</p>			
NOTE FOR MRC PRPY: IF DOCUMENT AVAILABILITY CODE B, D, F, OR H, REPLY TO MRC PRPY.			
ALL* (See Note Above)			
	PRPY	A	PROPRIETARY CHARACTERISTICS

FIIG T
Section Parts

APP		Mode	
Key	MRC	Code	Requirements

Definition: IDENTIFICATION OF THOSE CHARACTERISTICS INCLUDED IN THE DESCRIPTION FOR WHICH A NON-GOVERNMENT ACTIVITY HAS IDENTIFIED ALL OR SELECTED CHARACTERISTICS OF THE ITEM AS BEING PROPRIETARY AND THEREFORE RESTRICTED FROM RELEASE OUTSIDE THE GOVERNMENT WITHOUT PRIOR PERMISSION OF THE ORIGINATOR OF THE DATA.

Reply Instructions: Enter the MRC codes of the individual characteristics of the description which are marked proprietary on the technical data, using AND coding (\$\$) for multiple characteristics. If all the MRCs are proprietary, enter the reply PACS. If none of the MRCs is proprietary, enter the reply NPAC. (e.g., PRPYAPACS*; PRPYANPAC*; PRPYAMATL\$\$ASURF*)

NOTE FOR MRC ENAC: ANSWERING THIS MRC WILL GENERATE AN ENAC CODE IN THE ITEM IDENTIFICATION SEGMENT (A) OF THE NSN.

ALL* (See Note Above)

ENAC	D	ENVIRONMENTAL ATTRIBUTE CODE
------	---	------------------------------

Definition: INDICATES THE TYPE OF PRODUCT THAT MEETS OR EXCEEDS THE GOVERNMENT GUIDELINES FOR ENVIRONMENTALLY PREFERRED CHARACTERISTICS.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., ENACDFM*; ENACDFM\$\$DFN*)

<u>REPLY</u>	<u>REPLY (EN02)</u>
<u>CODE</u>	
FM	ENERGY EFFICIENT – RESIDENTIAL HVAC EQUIPMENT – ELECTRIC WATER HEATERS
FN	ENERGY EFFICIENT– RESIDENTIAL HVAC EQUIPMENT – GAS WATER HEATERS
XX	REVIEWED – DOES NOT MEET SOME ENAC CRITERIA

NOTE FOR MRC AHWS: IF REPLY CODE FM OR FN WAS ENTERED FOR MRC ENAC, REPLY TO MRC AHWS.

ALL *

AHWS	J	ENERGY CONSUMPTION RATING
------	---	---------------------------

FIIG T
Section Parts

APP		Mode	
Key	MRC	Code	Requirements

Definition: THE ENERGY CONSUMPTION OF THE ITEM AS DETERMINED BY A GOVERNMENT OR INDUSTRY STANDARD.

Reply Instructions: Enter the Reply Code from the table below followed by the numeric value. (e.g., AHWSJAA9.7*)

<u>REPLY</u>	<u>REPLY (AD68)</u>
<u>CODE</u>	
AA	KILOWATT-HOURS OF ELECTRICITY PER 100 POUNDS (42 KG) OF ICE PRODUCED, CERTIFIED TO ARI STANDARD 810

ALL*

ELRN G EXTRA LONG REFERENCE NUMBER

Definition: A REFERENCE NUMBER EXCEEDING 32 POSITIONS.

Reply Instructions: Enter the entire reference number. Do not include the 5-position Commercial and Government Entity (CAGE) Code unless there is more than one extra long reference number on the NSN, (e.g., ELRNGANN112036BIL060557LEN313605UZ62365*).

If there is more than one extra long reference number on the NSN, include the CAGE or NCAGE and separate each reference by using the "&" character, (e.g., 28480 ANN112036BIL060557LEN313605UZ62365 & S1234 NN112036BIL060557LEN313605UZ62365).

In determining quantity of characters in the reference number, count will be made after modification in accordance with Volume 2, Chapter 9, FLIS Procedures Manual, DoD 4100.39-M.

ALL*

ELCD D EXTRA LONG CHARACTERISTIC DESCRIPTION

Definition: A DESCRIPTION THAT EXCEEDS 5000 CHARACTERS.

Reply Instructions: Enter the Reply Code from the table below. (e.g., ELCDDA*)

<u>REPLY</u>	<u>REPLY (AN58)</u>
<u>CODE</u>	
A	ADDITIONAL DESCRIPTIVE DATA ON MANUAL RECORD

FIG T
Section Parts

APP Key	MRC	Mode Code	Requirements
------------	-----	--------------	--------------

FIIG T
Section Parts

SECTION: SUPPTECH

APP

Key	MRC	Mode Code	Requirements
-----	-----	-----------	--------------

ALL

AFJK	J	CUBIC MEASURE
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Definition: A MEASUREMENT OF VOLUME TAKEN BY MULTIPLYING THE LENGTH BY THE WIDTH BY THE HEIGHT OF AN ITEM AND RENDERED IN CUBIC UNITS.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., AFJKJF1.0219*; AFJKJE0.0289*)

<u>REPLY CODE</u>	<u>REPLY (AD42)</u>
F	CUBIC FEET
E	CUBIC METERS

ALL

SUPP	G	SUPPLEMENTARY FEATURES
------	---	------------------------

Definition: CHARACTERISTICS OR QUALITIES OF AN ITEM, NOT COVERED IN ANY OTHER REQUIREMENT, WHICH ARE CONSIDERED ESSENTIAL INFORMATION FOR ONE OR MORE FUNCTIONS EXCLUDING NSN ASSIGNMENT.

Reply Instructions: Enter the reply in clear text. (e.g., SUPPGMAY INCL HOLE IN UPPER SUPPORT FOR MTG DURING SHIPMENT*)

ALL

ZZZV	G	FSC APPLICATION DATA
------	---	----------------------

Definition: THE JUSTIFICATION FOR THE ASSIGNMENT OF A FEDERAL SUPPLY CLASS (FSC) TO AN ITEM BASED ON THE CLASSIFICATION OF THE NEXT HIGHER CLASSIFIABLE ASSEMBLY.

Reply Instructions: Enter the name of the next higher classifiable assembly in clear text. (e.g., ZZZVGFUEL SYSTEM,GASOLINE ENGINE, NONAIRCRAFT*)

ALL

AGAV	G	END ITEM IDENTIFICATION
------	---	-------------------------

FIIG T
Section Parts

APP

Key MRC Mode Code Requirements

Definition: THE NATIONAL STOCK NUMBER OR THE IDENTIFICATION INFORMATION OF THE END EQUIPMENT FOR WHICH THE ITEM IS A PART.

Reply Instructions: Enter the applicable reply in clear text.

(e.g., AGAVG3930-00-000-0000*;

AGAVGFORKLIFT TRUCK, SMITH CORPORATION, MODEL 12, TYPE A*)

ALL

CXCY G PART NAME ASSIGNED BY CONTROLLING AGENCY

Definition: THE NAME ASSIGNED TO THE ITEM BY THE GOVERNMENT AGENCY OR COMMERICAL ORGANIZATION CONTROLLING THE DESIGN OF THE ITEM.

Reply Instructions: Enter the reply in clear text. (e.g., BLOOD COLLECTING UNIT*)

FIG T
Section Parts

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Table 1 - NONDEFINITIVE SPEC/STD DATA
NONDEFINITIVE SPEC/STD DATA

<u>REPLY CODE</u>	<u>REPLY (AD08)</u>
AL	ALLOY
AN	ANNEX
AP	APPENDIX
AC	APPLICABILITY CLASS
AR	ARRANGEMENT
AS	ASSEMBLY
AB	ASSORTMENT
BX	BOX
CY	CAPACITY
CA	CASE
CT	CATEGORY
CL	CLASS
CE	CODE
CR	COLOR
CC	COMBINATION CODE
CN	COMPONENT
CP	COMPOSITION
CM	COMPOUND
CD	CONDITION
CS	CONSTRUCTION
DE	DESIGN
DG	DESIGNATOR
DW	DRAWING NUMBER
EG	EDGE
EN	END
FY	FAMILY
FG	FIGURE
FN	FINISH
FM	FORM
FA	FORMULA
GR	GRADE
GP	GROUP
BA	IMAGE COLOR
NS	INSERT
TM	ITEM
KD	KIND
KT	KIT
LG	LENGTH
LT	LIMIT
MK	MARK
AA	MARKER
ML	MATERIAL
BB	MAXIMUM DENSITY

<u>REPLY CODE</u>	<u>REPLY (AD08)</u>
MH	MESH
ME	METHOD
BC	MINIMUM DENSITY
MD	MODEL
MT	MOUNTING
NR	NUMBER
PT	PART
PN	PATTERN
PC	PHYSICAL CONDITION
PS	PIECE
PL	PLAN
PR	POINT
QA	QUALITY
RN	RANGE
RT	RATING
RF	REFERENCE NUMBER
SC	SCHEDULE
SB	SECTION
SL	SELECTION
SE	SERIES
SV	SERVICE
SX	SET
SA	SHADE
SH	SHAPE
SG	SHEET
SZ	SIZE
PZ	SPECIES
SQ	SPECIFICATION SHEET
SD	SPEED
ST	STYLE
SS	SUBCLASS
SF	SUBFORM
SP	SUBTYPE
SN	SURFACE CONDITION
SY	SYMBOL
SM	SYSTEM
TB	TABLE
TN	TANNAGE
TP	TEMPER
TX	TEXTURE
TK	THICKNESS
TT	TREATMENT
TR	TRIM
TY	TYPE
YN	UNIT
VA	VARIETY
WT	WEIGHT
WD	WIDTH

Table 2 - MATERIALS
MATERIALS

<u>REPLY CODE</u>	<u>REPLY (AD09)</u>
A	ANY ACCEPTABLE
BNG000	BRONZE, NAVAL
CU0000	COPPER
CK0000	COPPER ALLOY
CUH000	COPPER, SILICON ALLOY
GS0000	GLASS
NFF000	NICKEL ALLOY
NF0000	NICKEL (Alumel)
NC0000	NICKEL COPPER ALLOY (Monel)
ST0000	STEEL
STB000	STEEL, CORROSION RESISTING
ZN0000	ZINC

Table 3 - SURFACE TREATMENTS
SURFACE TREATMENTS

<u>REPLY CODE</u>	<u>REPLY (AD09)</u>
A	ANY ACCEPTABLE
ENE000	ENAMEL, BAKED
ENC000	ENAMELED
GB0000	GALVANIZED
GS0000	GLASS
GSZ000	GLASS, FUSED
PN0000	PAINTED
PS0000	PASSIVATED
BHB000	PORCELAIN COATED
TDA000	TINNED

Table 4 - THREAD SERIES
THREAD SERIES

<u>REPLY CODE</u>	<u>REPLY (AH06)</u>
BS	BSP.TR EXT (British Standard)
BR	BSP.TR INT (British Standard)
FP	F-PTF (Fine Taper Pipe Thread (Dryseal))
SM	ISO-M (SI (Metric), other than coarse)
SS	ISO-S (SI (Metric), coarse)
NP	NPT (American Standard Taper Pipe Thread)
NT	NPTF (American Standard Taper Pipe Thread (Dryseal))
PT	PTF-SAE SHORT (Short Taper Pipe Thread (Dryseal))
PE	PTF-SPL EXTRA SHORT (Special Extra Short Taper Pipe Thread (Dryseal))

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<u>REPLY CODE</u>	<u>REPLY (AH06)</u>
PF	PTF-SPL SHORT (Special Short Taper Pipe Thread (Dryseal))
PP	PTF-SPL (Special Taper Pipe Thread (Dryseal))
NF	UNF (Unified Fine Screw thread)
NS	UNS (Unified Special Straight Screw thread)
WW	WHITWORTH

Reference Drawing Groups

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THREAD SIZE NUMBER TO DECIMAL EQUIVALENT

<u>SIZE NO.</u>	<u>DECIMAL EQUIVALENT OF AN INCH</u>
0	0.060
1	0.073
2	0.086
3	0.099
4	0.112
5	0.125
6	0.138
8	0.164
10	0.190
12	0.216

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APPENDIX C

STANDARD FRACTION TO DECIMAL CONVERSION CHART

<u>4ths</u>	<u>8ths</u>	<u>16ths</u>	<u>32nds</u>	<u>64ths</u>	<u>To 3</u>	<u>To 4</u>	<u>4ths</u>	<u>8ths</u>	<u>16ths</u>	<u>32nds</u>	<u>64ths</u>	<u>To 3</u>	<u>To 4</u>
				1/64	.016	.0156					33/64	.516	.5156
			1/32	-----	.031	.0312				17/32	-----	.531	.5312
				3/64	.047	.0469					35/64	.547	.5469
		1/16	-----		.062	.0625			9/16	-----	-----	.562	.5625
				5/64	.078	.0781					37/64	.578	.5781
			3/32	-----	.094	.0938				19/32	-----	.594	.5938
				7/64	.109	.1094					39/64	.609	.6094
	1/8	-----	-----	-----	.125	.1250		5/8	-----	-----	-----	.625	.6250
				9/64	.141	.1406					41/64	.641	.6406
			5/32	-----	.156	.1562				21/32	-----	.656	.6562
				11/64	.172	.1719					43/64	.672	.6719
		3/16	-----	-----	.188	.1875			11/16	-----	-----	.688	.6875
				13/64	.203	.2031					45/64	.703	.7031
			7/32	-----	.219	.2188				23/32	-----	.719	.7188
				15/64	.234	.2344					47/64	.734	.7344
1/4	-----	-----	-----	-----	.250	.2500	3/4	-----	-----	-----	-----	.750	.7500
				17/64	.266	.2656					49/64	.766	.7656
			9/32	-----	.281	.2812				25/32	-----	.781	.7812
				19/64	.297	.2969					51/64	.797	.7969
		5/16	-----	-----	.312	.3125			13/16	-----	-----	.812	.8125
				21/64	.328	.3281					53/64	.828	.8281
			11/32	-----	.344	.3438				27/32	-----	.844	.8438
				23/64	.359	.3594					55/64	.859	.8594
	3/8	-----	-----	-----	.375	.3750		7/8	-----	-----	-----	.875	.8750
				25/64	.391	.3906					57/64	.891	.8906
			13/32	-----	.406	.4062				29/32	-----	.906	.9062
				27/64	.422	.4219					59/64	.922	.9219
		7/16	-----	-----	.438	.4375			15/16	-----	-----	.938	.9375
				29/64	.453	.4531					61/64	.953	.9531
			15/32	-----	.469	.4688				31/32	-----	.969	.9688
				31/64	.484	.4844					63/64	.984	.9844
					.500	.5000						1.000	1.0000

FIIG Change List

FIIG Change List, Effective September 3, 2010

This change replaced with ISAC or and/or coding.